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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/696,484	10/29/2003	John M. Smith III	2250-13A	6978
4678	7590	08/30/2007		
MACCORD MASON PLLC 300 N. GREENE STREET, SUITE 1600 P. O. BOX 2974 GREENSBORO, NC 27402			EXAMINER CAMERON, ERMA C	
			ART UNIT 1762	PAPER NUMBER
			MAIL DATE 08/30/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/696,484	SMITH ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	/Erma Cameron/	1762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 23 July 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 23-43 is/are pending in the application.
- 4a) Of the above claim(s) 25-29, 35-39 and 41 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 23-24, 30-34, 40, 42-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Response to Amendment***

#### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. The rejection of Claims 23-24, 30-34, 40 and 42 under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement (“must contain flame retardant or does not need retardant”) is withdrawn because of the amendment filed 7/23/2007.

3. Claims 23-24, 30-34, 40 and 42-43 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

a) Example 6 lacks flame retardant, and yet pass the flammability test. This contradicts the rest of the specification, that says that flame retardant is required.

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b) The amendment to page 10 states that the composition of Table 8 and of Table 10 were used in example 7. Both cannot be correct.

4. Claims 23-24, 30-34, 40 and 42-43 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The examiner cannot find where “bedspread” or “furniture upholstery” of new claim 43 are in the specification as originally filed, and are therefore new matter.

The applicant is requested to cancel all new matter.

#### ***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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6. The rejection of Claims 42, 23 and 40 under 35 U.S.C. 102(b) as being clearly anticipated by JP 07-157977 is withdrawn because of the amendment filed 7/23/2007.

7. The rejection of Claims 42, 23 and 40 under 35 U.S.C. 102(b) as being clearly anticipated by EP 503114 is withdrawn because of the amendment filed 7/23/2007.

***Claim Rejections - 35 USC § 103***

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. The rejection of Claim 24 under 35 U.S.C. 103(a) as being unpatentable over JP 07-157977 is withdrawn because of the amendment filed 7/23/2007.

10. The rejection of Claim 24 under 35 U.S.C. 103(a) as being unpatentable over EP 503114 is withdrawn because of the amendment filed 7/23/2007.

11. Claims 23-24, 30-31, 33-34, 40 and 42-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 07-17977 taken in view of White et al (A Comparison of Antimicrobials for the Textile Industry, 2000).

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'977 teaches applying by immersion or other methods a fluoropolymer waterproofing and flame retardant P-300 or CDP composition to a fire-resistant polyester (Trevira CS) (see Abstracts and [004], [0007], [0013], [0021], [0022] and Table I of translation). Immersion would inherently saturate the polyester Trevira cloth. As a fire-resistant polyester, Trevira CS would inherently pass the NFPA 701 test.

'977 does not teach that the composition is applied by padding, but it would have been obvious to one of ordinary skill in the art to have used a conventional application method such as padding in the '977 process.

'977 does not teach the use an antimicrobial such as an organosilane.

White teaches that a molecularly bound organosilane is used as an antimicrobial in the textile industry (p 2).

It would have been obvious to one of ordinary skill in the art to have used the antimicrobial organosilanes of White in the treatment composition of '977 because of the need for an antimicrobial on a fabric exposed to the weather and wetness as the light-weight tent or canvas fabric of '977 is.

White does not teach the % of antimicrobial to add, but it would have been obvious to one of ordinary skill in the art to have optimized the level of antimicrobial through no more than routine experimentation as concentration is known to be an important factor to control in achieving efficacy of an antimicrobial.

'977 does not specifically teach the products of claim 43, but the light-weight canvas of '977 could presumably be used to cover furniture, particularly outdoor furniture, or be used to make drapery.

12. Claims 23-24, 30-34, 40 and 42-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 07-157977 taken in view of Blehm et al (4842766).

'977 teaches applying by immersion or other methods a fluoropolymer waterproofing and flame retardant P-300 or CDP composition to a fire-resistant polyester (Trevira CS) (see Abstracts and [004], [0007], [0013], [0021], [0022] and Table I of translation). Immersion would inherently saturate the polyester Trevira cloth. As a fire-resistant polyester, Trevira CS would inherently pass the NFPA 701 test.

'977 does not teach that the composition is applied by padding, but it would have been obvious to one of ordinary skill in the art to have used a conventional application method such as padding in the '977 process.

'977 does not teach the using an antimicrobial such as an organosilane like the silane of claim 32.

'766 teaches that a silane such as 3-(trimethoxysilyl)-propyldimethyloctadecyl ammonium chloride may be used as an antimicrobial on polyester fabric at 0 to 5 weight % (see Example 5). Silanes are known as coupling agents, because they covalently bind to other substances. '766 reports that the silane is durably bound to the substrate it is applied to (8:3-8).

The application concentration overlaps with applicant's claimed concentration.

The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have selected the overlapping portion of the range

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disclosed by the reference because overlapping ranges have been held to be a prima facie case of obviousness. See *In re Malagari* 182 USPQ 549.

It would have been obvious to one of ordinary skill in the art to have used the antimicrobial silane of '766 in the treatment composition of '977 because of the need for an antimicrobial on a fabric exposed to the weather and wetness as the light-weight tent or canvas fabric of '977 is.

'977 does not specifically teach the products of claim 43, but the light-weight canvas of '977 could presumably be used to cover furniture, particularly outdoor furniture, or be used to make drapery.

13. Claims 23-24, 30-31, 33-34, 40 and 42-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 503114 taken in view of White et al (A Comparison of Antimicrobials for the Textile Industry, 2000).

'114 teaches applying a composition comprising a waterproofing fluorocarbon like Scotchguard and a flame retardant to Trevira CS to give the Trevira oil-, soil-, and water-repellency as well as durable flame retardation (see Abstracts, in particular the WPIX Abstract, and pages 4-6, claims 1, 7, 11). As a fire-resistant polyester, Trevira CS would inherently pass the NFPA 701 test.

'114 teaches that the composition is applied in a finishing bath (page 9), but does not teach that the composition is applied by padding. But it would have been obvious to one of



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ordinary skill in the art to have used a conventional application method such as padding in the '114 process.

'114 does not teach the use an antimicrobial such as an organosilane.

White teaches that a molecularly bound organosilane is used as an antimicrobial in the textile industry (p 2).

It would have been obvious to one of ordinary skill in the art to have used the antimicrobial organosilanes of White in the treatment composition of '114 because of the need for an antimicrobial on a fabric exposed to the weather and wetness as the awning fabric of '114 is (page 5).

White does not teach the % of antimicrobial to add, but it would have been obvious to one of ordinary skill in the art to have optimized the level of antimicrobial through no more than routine experimentation as concentration is known to be an important factor to control in achieving efficacy of an antimicrobial.

'114 does not specifically teach the products of claim 43, but the fabric of '114 could presumably be used to cover furniture, particularly outdoor furniture, or be used to make drapery.

14. Claims 23-24, 30-34, 40 and 42-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 503114 taken in view of Blehm et al (4842766).

'114 teaches applying a composition comprising a waterproofing fluorocarbon like Scotchguard and a flame retardant to Trevira CS to give the Trevira oil-, soil-, and water-

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repellency as well as durable flame retardation (see Abstracts, in particular the WPIX Abstract, and pages 4-6, claims 1, 7, 11). As a fire-resistant polyester, Trevira CS would inherently pass the NFPA 701 test.

'114 teaches that the composition is applied in a finishing bath (page 9), but does not teach that the composition is applied by padding. But it would have been obvious to one of ordinary skill in the art to have used a conventional application method such as padding in the '114 process.

'114 does not teach the using an antimicrobial such as an organosilane like the silane of claim 32.

'766 teaches that a silane such as 3-(trimethoxysilyl)-propyldimethyloctadecyl ammonium chloride may be used as an antimicrobial on polyester fabric at 0 to 5 weight % (see Example 5). Silanes are known as coupling agents, because they covalently bind to other substances. '766 reports that the silane is durably bound to the substrate it is applied to (8:3-8).

The application concentration overlaps with applicant's claimed concentration.

The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have selected the overlapping portion of the range disclosed by the reference because overlapping ranges have been held to be a prima facie case of obviousness. See *In re Malagari* 182 USPQ 549.

It would have been obvious to one of ordinary skill in the art to have used the antimicrobial silane of '766 in the treatment composition of '114 because of the need for an antimicrobial on a fabric exposed to the weather and wetness as the awning fabric of '114 is (page 5).

'114 does not specifically teach the products of claim 43, but the fabric of '114 could presumably be used to cover furniture, particularly outdoor furniture, or be used to make drapery.

### *Response to Arguments*

15. The applicant has argued that various finishes should not be applied to FR polyesters, according to the makers. However, that is exactly what JP'977 and EP'114 are doing. The White and Blehm references teach applying antimicrobials to a variety of fabrics, including polyester (Blehm 15:21). The applicant has also argued that the JP'977 fabric would not be suited for cutting or sewing into the items of claim 43, but has offered no evidence of this. The fabric of JP'977 is referred to as a light-weight canvas (WPIX Abstract; [0001] of translation) and is said to be easy to handle and having a good texture ([0005] of translation).

### *Conclusion*

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

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will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

17. Any inquiry concerning this communication or earlier communications from the examiner should be directed to /Erma Cameron/ whose telephone number is 571-272-1416. The examiner can normally be reached on 8:30-6:00, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Erma Cameron/  
Primary Examiner  
Art Unit 1762

August 29, 2007